



**DVI Computer
Sharing Device**

CS261

User Manual



EMC Information

FEDERAL COMMUNICATIONS COMMISSION INTERFERENCE STATEMENT: This equipment has been tested and found to comply with the limits for a Class A digital device, pursuant to Part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference when the equipment is operated in a commercial environment. This equipment generates, uses, and can radiate radio frequency energy and, if not installed and used in accordance with the instruction manual, may cause harmful interference to radio communications. Operation of this equipment in a residential area is likely to cause harmful interference in which case the user will be required to correct the interference at his own expense.

The device complies with Part 15 of the FCC Rules. Operation is subject to the following two conditions: (1) this device may not cause harmful interference, and (2) this device must accept any interference received, including interference that may cause undesired operation.

FCC Caution: Any changes or modifications not expressly approved by the party responsible for compliance could void the user's authority to operate this equipment.

CE Warning: This is a class A product. In a domestic environment this product may cause radio interference in which case the user may be required to take adequate measures.

KCC Statement

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이 기기는 업무용 (A 급) 전자파적합기기로서 판매자 또는 사용자는 이점을 주의하시기 바라며 , 가정 외의 지역에서 사용하는 것을 목적으로 합니다 .

RoHS

This product is RoHS compliant.



SJ/T 11364-2006

The following contains information that relates to China.

| 部件名称 | 有毒有害物质或元素 | | | | | |
|------|-----------|---|---|-----|------|-------|
| | 铅 | 汞 | 镉 | 六价铬 | 多溴联苯 | 多溴二苯醚 |
| 电器部件 | ● | ○ | ○ | ○ | ○ | ○ |
| 机构部件 | ○ | ○ | ○ | ○ | ○ | ○ |

- : 表示该有毒有害物质在该部件所有均质材料中的含量均在SJ/T 11363-2006规定的限量要求之下。
- : 表示符合欧盟的豁免条款, 但该有毒有害物质至少在该部件的某一均质材料中的含量超出SJ/T 11363-2006的限量要求。
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User Information

Online Registration

Be sure to register your product at our online support center:

- ♦ International – <http://support.aten.com>
- ♦ North America – http://www.aten-usa.com/product_registration

Telephone Support

For telephone support, call one of the following numbers:

| | |
|----------------|--------------------------|
| International | 886-2-8692-6959 |
| China | 86-400-810-0-810 |
| Japan | 81-3-5615-5811 |
| Korea | 82-2-467-6789 |
| North America | 1-888-999-ATEN ext. 4988 |
| United Kingdom | 44-8-4481-58923 |

User Notice

All information, documentation, and specifications contained in this manual are subject to change without prior notification by the manufacturer. The manufacturer makes no representations or warranties, either expressed or implied, with respect to the contents hereof and specifically disclaims any warranties as to merchantability or fitness for any particular purpose. Any of the manufacturer's software described in this manual is sold or licensed 'as is'. Should the programs prove defective following their purchase, the buyer (and not the manufacturer, its distributor, or its dealer), assumes the entire cost of all necessary servicing, repair and any incidental or consequential damages resulting from any defect in the software.

The manufacturer of this system is not responsible for any radio and/or TV interference caused by unauthorized modifications to this device. It is the responsibility of the user to correct such interference.

The manufacturer is not responsible for any damage incurred in the operation of this system if the correct operational voltage setting was not selected prior to operation. PLEASE VERIFY THAT THE VOLTAGE SETTING IS CORRECT BEFORE USE.

Package Contents

The basic CS261 package consists of:

- ◆ 1 CS261 2-Port DVI Computer Sharing Device
- ◆ 1 Custom KVM Cable Set (1.8m)
- ◆ 1 Power Adapter
- ◆ 1 User Instructions*

Check to make sure that all the components are present and that nothing got damaged in shipping. If you encounter a problem, contact your dealer.

Read this manual thoroughly and follow the installation and operation procedures carefully to prevent any damage to the unit, and/or any of the devices connected to it.

* Features may have been added to the CS261 since this manual was printed. Please visit our website to download the most up to date version of the manual.

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Manual Date: 2016-01-12

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About this Manual

This User Manual is provided to help you get the most from your c/c system. It covers all aspects of installation, configuration and operation. An overview of the information found in the manual is provided below.

Chapter 1, Introduction, introduces you to the CS261 system. Its purpose, features and benefits are presented, and its front and back panel components are described.

Chapter 2, Hardware Setup, describes how to set up your installation. The necessary steps, from basic to advanced setups, are provided.

Chapter 3, Basic Operation, explains the fundamental concepts involved in operating the CS261.


Chapter 4, Operation, explains the CS261's operating and hotkey settings mode as well as the EDID selection feature.

Chapter 5, The Firmware Upgrade Utility, explains how to use this utility to upgrade the CS261 firmware to the latest available version.

Appendix, provides specifications and other technical information regarding the CS261.

Conventions

This manual uses the following conventions:

- `Monospaced` Indicates text that you should key in.
- [] Indicates keys you should press. For example, [Enter] means to press the **Enter** key. If keys need to be chorded, they appear together in the same bracket with a plus sign between them: [Ctrl+Alt].
1. Numbered lists represent procedures with sequential steps.
- ◆ Bullet lists provide information, but do not involve sequential steps.
- Indicates selecting the option (on a menu or dialog box, for example), that comes next. For example, Start → Run means to open the *Start* menu, and then select *Run*.
-  Indicates critical information.

Product Information

For information about all ATEN products and how they can help you connect without limits, visit ATEN on the Web or contact an ATEN Authorized Reseller. Visit ATEN on the Web for a list of locations and telephone numbers

- ◆ International – <http://www.aten.com>
- ◆ North America – <http://www.aten-usa.com>

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Chapter 1

Introduction

Overview

The CS261 is a DVI micro-processor controlled computer sharing solution that offers a multi-user/single-tasking experience and enables two users to share the use of a single USB computer from two separate consoles (monitor, USB keyboard, USB mouse, speaker and microphone). The CS261 is ideal for small office environments. All programs, files and resources on any connected computer can be easily accessed and shared by both users without the additional complexity and expense of setting up a network environment. Users are able to operate computers on the installation one by one while, for additional security, the other console's video and audio output is optionally disabled. The CS261 even provides a convenient OSD (On Screen Display) function that allows either of the Consoles to access any computer connected to the system by means of an on screen, console status driven interface.

Setup is fast and easy; plugging cables into their appropriate ports is all that is entailed. There is no software to configure, so there is no need to get involved in complex software installation routines or be concerned with incompatibility problems. Because the CS261 intercepts keyboard input directly, it works on any hardware platform and with all operating systems.

Responding to the growing use of audio input/output in the workstation space, the CS261 has been designed with built in microphone and speaker support, as well.

Features

- ◆ The CS261 is a DVI computer sharing device that expands your control so that two users can easily share one computer using one of 2 modes: auto and manual.
- ◆ Superior video quality: Supports resolutions up to 1080p, 1920x1200 and 4K2K@30Hz.*
- ◆ Supports 2.1 channel stereo sound and high definition audio.**
- ◆ HDCP compliant: Supports HDCP-enabled devices.
- ◆ Multiple EDID selection: Selects optimum EDID settings for smooth power-up and highest quality display.
- ◆ Supports RS232 serial commands: For switching operation and system configuration.
- ◆ Console selection via the pushbutton, hotkey and RS232 commands: Easily access the computer using any of these options.
- ◆ Screen Saver feature: Prevents anyone from seeing the screen's display after a period of inactivity.
- ◆ Mac/Sun keyboard support and emulation: Users can use PC keyboards with consoles and still work within Macintosh/Sun platforms.***
- ◆ Multilingual keyboard mapping: Supports English, Japanese, French and German keyboards.
- ◆ Multiplatform support: You can use the CS261 whether you are running a Windows, Linux, Mac or Sun system.
- ◆ Upgradeable firmware through computer's USB port: Stay current with the latest functionality improvements and updates with upgradeable firmware.
- ◆ No software required: Eliminate incompatibility and installation issues along with the need to configure software.

-
- Note:**
1. 4K2K@30Hz is supported when using a DVI to HDMI cable.
 2. High definition audio can be converted using a DVI to HDMI cable.
 3. PC keyboard combinations emulate Mac/Sun keyboards.
-

Requirements

Console

- ◆ A DVI monitor capable of the highest resolution that you will be using on any computer in the installation
- ◆ A USB Keyboard and a USB Mouse
- ◆ Speakers and microphone (optional)

Computer

The following equipment must be installed on the computer that is to be connected to the system:

- ◆ A DVI video port
- ◆ USB Type A port
- ◆ Speaker and microphone ports (optional)

Cables

Use of substandard cables may damage the connected devices or degrade overall performance. For optimum signal integrity and to simplify the layout, we strongly recommend that you use the following high quality Custom Cable sets:

KVM Cables

- ◆ 2L-7D02U: 1.8m
- ◆ 2L-7D03U: 3.0m
- ◆ 2L-7D05U: 5.0m

Video Interface Converters

- ◆ 2A-127G: DVI to HDMI
- ◆ 2A-128G: HDMI to DVI

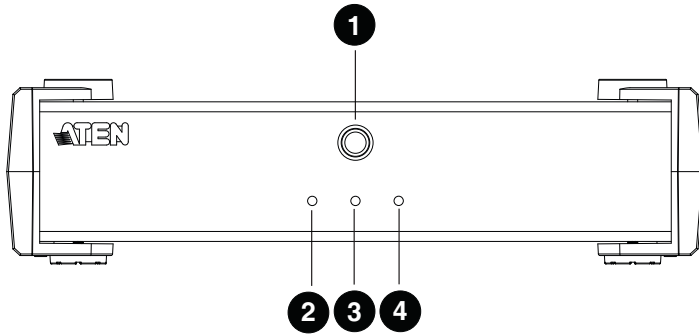
Operating Systems

Supported operating systems are shown in the table below:

| OS | | Version |
|-----------|---------|----------------------|
| Windows | | 2000 and higher |
| Linux | RedHat | 6.0 and higher |
| | SuSE | 8.2 and higher |
| UNIX | FreeBSD | 3.51 and higher |
| | Sun | Solaris 8 and higher |
| Novell | Netware | 5.0 and higher |
| Mac | | OS 9 and higher |

Components

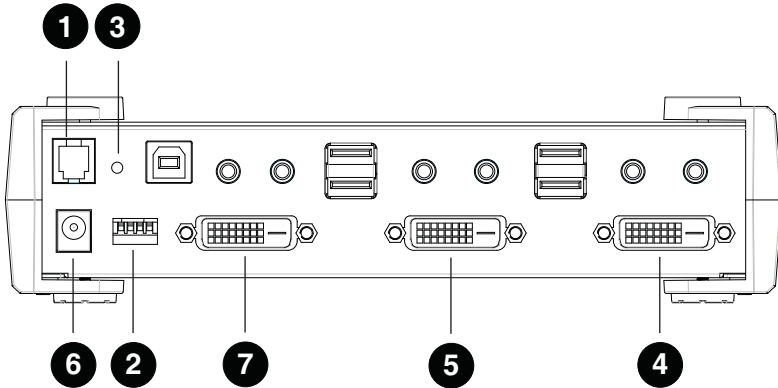
Front Panel



| No. | Component | Description |
|-----|--|--|
| 1 | MANUAL/ AUTO Selection Button | This button is used to switch between Manual and Auto Modes. The default is Auto Mode. Repeatedly pressing the button cycles through the modes in the following order: Auto Mode -> Console 1 (Manual) -> Console 2 (Manual) -> Auto Mode. |
| 2 | C1 LED* | Lights when Console 1 accesses the computer. Turns off when Console 2 accesses the computer. |
| 3 | C2 LED* | Lights when Console 2 accesses the computer. Turns off when Console 1 accesses the computer. |
| 4 | MANUAL LED | Lights to indicate that the CS261 is set to Manual Mode. In Auto Mode the LED does not illuminate. |

* In Auto Mode, when neither console is accessing the computer, both Console LEDs are illuminated.

Rear Panel



| No. | Component | Description |
|-----|-----------------|--|
| 1 | Serial Port | Use an RJ-11 to RS232 cable to allow RS232 functions. |
| 2 | DIP Switch | This is a 4-pin DIP switch. Use it to enable/disable RS232 commands, screen saver, private mode and privileged user settings. |
| 3 | Reset Button | Press this semi-recessed button to reset the system. |
| 4 | Console 1 Ports | The cables from the DVI monitor, speakers, microphone, USB keyboard and mouse of Console 1 plug in here. |
| 5 | Console 2 Ports | The cables from the DVI monitor, speakers, microphone, USB keyboard and mouse of Console 2 plug in here. |
| 6 | Power Jack | The power adapter cable plugs in here. |
| 7 | PC Port | The KVM cables that attach to your computers plug in here (see <i>Cables</i> , page 3, for a list of compatible KVM cables). The CS261's firmware may also be upgraded connected to this port. |

Chapter 2

Hardware Setup



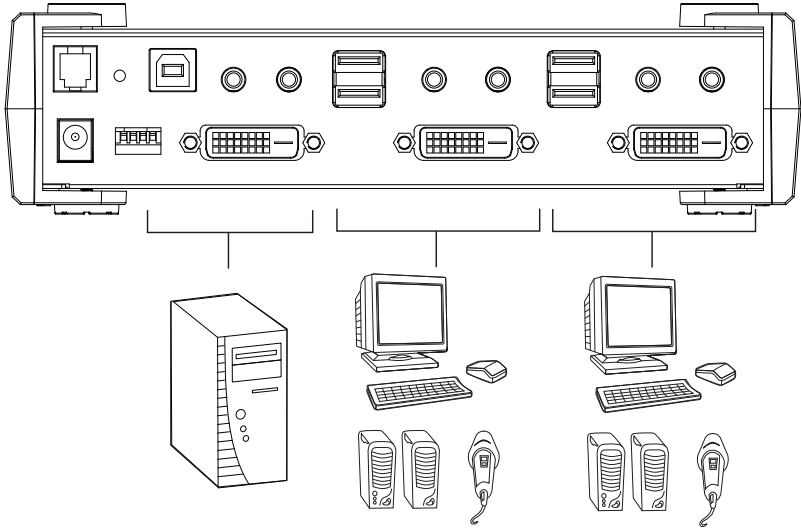
1. Important safety information regarding the placement of this device is provided on page 27. Please review it before proceeding.
2. Make sure that power to all the devices you will be connecting up have been turned off. You must unplug the power cords of any computers that have the Keyboard Power On function.

Installation

1. Connect the DVI connector on the KVM cable to the Computer Port on the CS261.
2. Connect the DVI connector on the KVM cable to the DVI video output port on the computer. Plug the USB connector into any available USB port.
3. Plug the keyboard, mouse and monitor for the console that you want to designate as Console 1 into the Console 1 port.
4. Repeat step 3 for Console 2.
5. Plug the power adapter into the AC power source; plug the power adapter into the power jack on the CS261.
6. Power on the computer and monitors.

Note: The mouse and keyboard connectors are USB 1.1 ports.

Installation Diagram



Chapter 3

Basic Operation

Overview

As a computer sharing device, the CS261 provides basic access via two different console modes: Console 1 Mode and Console 2 Mode. The CS261 provides three convenient methods of selecting console modes: Pushbutton Console Mode Selection – press the pushbutton on the front panel, Hotkey Console Mode Selection – enter combinations from the keyboard, and RS232 serial control – send RS232 commands.*

Note: Please refer to the *CS261 RS232 Command User Manual* for further details.

Pushbutton Console Mode Selection

Press the pushbutton on the front panel repeatedly to bring the focus to the desired console mode as follows:

Auto Mode → Manual Mode (Console 1) → Manual Mode (Console 2) → Auto Mode.

The LED lights indicate that the console is accessing the computer.

Hotkey Console Mode Selection

Selecting console modes via hotkey works only within Manual Mode (Console 1 and Console 2 mode). Press the Scroll Lock key twice and then the Enter key to switch from Console 1 to Console 2.

Note: If using [Scroll Lock] conflicts with other programs, [Ctrl] can be used instead, e.g. [Ctrl][Ctrl][Enter].

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Chapter 4

Operation

Overview

The CS261 features two operation modes: Auto Mode and Manual Mode. For a brief overview of these modes, see *Operation Modes*, page 32.

Auto Mode

For general, low-priority scenarios, default Auto Mode offers the simplest usability for computer sharing where control of the computer is selected on a first come, first served basis.

Auto Mode operates according to the following rules:

1. When the CS261 is turned on it starts in Auto Mode, and operates on a first come, first served basis. Both Console LEDs are On; the Manual LED is Off.
2. The first user to strike the keyboard or move the mouse gains control of the computer. As soon as this occurs:
 - ◆ The Console LED that corresponds to the user's console turns On.
 - ◆ The Console LED for the other console turns Off.
 - ◆ The CS261 locks onto that user's console.
 - ◆ If the user uses the keyboard or moves the mouse, a message appears on the other user's monitor indicating that the system is in use. After 10 seconds, the message will disappear and the user can view the computer display again (if the other user stops using the keyboard and moving the mouse). When the other user uses the keyboard or moves the mouse again, the OSD message will reappear:

The System Is Occupied. Please Wait.
 - ◆ The user who has control of the computer can prevent the other user from viewing the computer display and listening to the audio output by entering the following Hotkey combination:

[Num Lock]+[-], [D]

If the other user uses the keyboard or moves the mouse, a message appears indicating that the system is in use. After 10 seconds, the message disappears and the monitor displays a black background. If the

user uses the keyboard or moves the mouse, the OSD message will reappear.

3. If the user who has access to the CS261 does not use the keyboard or move the mouse before the Timeout Period (set with hotkeys) elapses:
 - ◆ The CS261 unlocks from that user's console;
 - ◆ Then, the CS261 switches to Auto Mode;
 - ◆ Both Console LEDs turn On;
 - ◆ The Manual LED is Off (since the CS261 is in Auto Mode);
 - ◆ Either console may take control of the computer.
4. To terminate Auto Mode access, repeatedly press the MANUAL/AUTO Button until the desired console controls the device.

Private Mode (Console 1)

For high-priority scenarios, Private Mode offers the best control during computer sharing where a specific user can at any time take control of the system. Console 1 or Console 2 can be set as the privileged user by setting the DIP switch pin four on or off (see page 13), which can also prevent the non-privileged user from viewing and controlling the computer (see page 11). Private Mode operates within Auto Mode and does not include a Timeout Period.

To enter Private Mode:

1. Make sure that the device is in Auto Mode and that DIP switch pin 3 is set to the On position before powering on the CS261.
2. Set Console 1 user as the privileged user if DIP switch pin 4 is set to On position. Otherwise, Console 2 user will be the privileged user.
3. Power on the CS261.
4. Wait for the Timeout period to expire (default: 5s).
5. From the keyboard of the privileged user, press the Shift key six times within two seconds.

In Private Mode, the user who does not have control of the computer (i.e. not the privileged user) cannot view or hear the computer. As a result, the OSD warning message does not appear in Private Mode.

To exit Private Mode:

- ◆ From the keyboard of the privileged user, press the Shift key six times within 2 seconds.

Or

- ◆ Press the MANUAL/AUTO Button.

Screen Saver

To protect the screens, when the CS261 is in Auto Mode or Manual Mode and no one is accessing the computer, both monitors will display a black background. If one of the consoles accesses the computer, the black background screen will disappear. To enable this function, set DIP switch pin 2 to the On position.

DIP Switch Settings Table

| DIP Switch Pins | | | | Function |
|-----------------|-----|-----|-----|--|
| 1 | 2 | 3 | 4 | |
| On | X | X | X | RS232 Command Function Enabled |
| Off | X | X | X | RS232 Command Function Disabled |
| X | On | X | X | Screen Saver Enabled |
| X | Off | X | X | Screen Saver Disabled |
| X | X | On | On | Private Mode Enabled: Console 1 is the Privileged User |
| X | X | On | Off | Private Mode Enabled: Console 2 is the Privileged User |
| X | X | Off | On | Private Mode Disabled |
| X | X | Off | Off | Private Mode Disabled |

Note: 1. Press a DIP switch pin down to turn it on and up to turn it off.

2. For best results, set the DIP switch pin before turning on both the CS261 or the computer.

Manual Mode

For longer tasks where uninterrupted access to the computer is required, Manual Mode offers the best operation setting for computer sharing. It is invoked by repeatedly pressing the MANUAL/AUTO Button to bring the focus to the desired console as follows:

Auto Mode → Manual Mode (Console 1) → Manual Mode (Console 2) → Auto Mode

- ◆ When Manual Mode is invoked, the CS261 switches to the selected console and prohibits the other console from controlling the computer. The selected console retains control until the MANUAL/AUTO Button is pressed again.
- ◆ A message appears on the other user's monitor indicating that the system is in use. After 10 seconds, the message disappears and the user can view the computer display. If the user strikes the keyboard or moves the mouse, the OSD message is displayed again:

The System Is Occupied. Please Wait.

- ◆ The user who has control of the computer can prevent the other user from viewing the computer display and listening the computer's audio output by entering the following Hotkey combination:

[Num Lock]+[-], [D]

If the other user strikes the keyboard or moves the mouse, a message appears indicating that the system is in use. After 10 seconds, the message disappears and the monitor displays a black background. If the user strikes the keyboard or moves the mouse, the OSD message is displayed again.

To switch access to the computer between the two consoles:

- ◆ Press the Manual/Auto Mode Button, or
- ◆ Enter the following hotkey combination:

[Scroll Lock], [Scroll Lock], [Enter]

Note: If using the Scroll Lock key conflicts with other programs running on the computer, the Ctrl key can be used instead, e.g. [Ctrl][Ctrl][Enter].

Timeout

In Auto Mode, users can set timeout period by hotkeys. Please refer to the see *Hotkey Settings Mode Summary Table*, page 17, for hotkey parameters that correspond to Timeout lengths (see *Auto Mode*, page 11, for more

information). The Timeout Period cannot be applied in Manual Mode and Private Mode.

Multiple EDID Selection

Users can select from Remix mode, Port1 mode and ATEN Default EDID mode, and from three resolutions. Multiple EDID selection can help improve video quality.

Users can select a desired EDID mode via Hotkeys (see *Hotkey Settings Mode Summary Table*, page 17, for more details).

Invoke Hotkey Settings Mode

To invoke HSM, please complete the following steps:

1. Press and hold down the Num Lock key.
2. Press and release the minus [-] key.
3. Release the Num Lock key.

Note: 1. The minus key must be released within half a second, otherwise the Hotkey invocation will be canceled.


















2. There is an alternate key combination to invoke the HSM. Please see *Hotkey Settings Mode Summary Table*, page 17, for more details.
-

Hotkey Settings Mode Summary Table

| Combination | Function |
|------------------|---|
| [Num Lock] + [-] | [H] Toggles between the default [Num Lock] [-] and alternate [Ctrl][F12] HSM invocation keys. |
| | [T] Toggles between the default [Scroll Lock] [Scroll Lock] and alternate [Ctrl][Ctrl] port switching keys. |
| | [B] Enables/Disables buzzer. |
| | [R] [Enter] Resets the hotkey settings to their default status. |
| | [D] Turn the other console's monitor and audio off or on. (This setting applies until changed or until CS261 is powered off.) |
| | [O][N] [Enter] In Auto Mode, determines the amount of time that passes from the last input by the controlling console to when the console lock is released. N=1: 5 second timeout N=2: 60 second timeout N=3: 120 second timeout N=4: 255 second timeout |
| | [S][N] [Enter] Determine the amount of time that passes from the last input by the controlling console to when screen saver appears. N=1: 1 minute N=2: 5 minutes N=3: 10 minutes N=4: 15 minutes N=5: 20 minutes |
| | [E][N] [Enter] Set EDID mode. (N=1, 2, 3, 4, 5) N=1: Set Remix Mode. N=2: Set Port1 Mode. N=3: Set ATEN default EDID, 1280x720@60Hz N=4: Set ATEN default EDID, 1600x1200@60Hz N=5: Set ATEN default EDID, 1920x1080@60Hz |
| | [F1] Sets the PC keyboard layout. |
| | [F2] Enables Mac keyboard emulation. |
| | [F3] Enables Sun keyboard emulation. |

| Combination | | Function |
|----------------------|----------------------------------|--|
| [Num Lock] + [-] | [F4] | Lists the current hotkey settings via the Paste function of a text editor. E.g. Hotkey: [num lock]+[-] and [scroll lock], [scroll lock] OS setting: PC Keyboard emulation: Enabled Mouse emulation: Enabled Keyboard layout: English |
| | [F5] | Performs a USB keyboard and mouse reset. |
| | [F6][NN] [Enter] | Set the keyboard language layout. Where “NN” is two digital numbers that represents the keyboard language code: <ul style="list-style-type: none"> ◆ U.S. English: 33 ◆ Japanese: 15 ◆ French: 08 ◆ German: 09 |
| | [u][p][g][r][a][d][e] [Enter] | Invokes the Firmware Upgrade Mode. |
| [Esc] or [Space Bar] | | Exits Hotkey Settings Mode. |

Keyboard Emulation

| PC Keyboard | Mac Keyboard | PC Keyboard | Sun Keyboard |
|--|---|---|---|
| [Shift] | Shift | [Ctrl] [T] | Stop |
| [Ctrl] | Ctrl | [Ctrl] [F2] | Again |
|  |  | [Ctrl] [F3] | Props |
| [Ctrl] [1] |  | [Ctrl] [F4] | Undo |
| [Ctrl] [2] |  | [Ctrl] [F5] | Front |
| [Ctrl] [3] |  | [Ctrl] [F6] | Copy |
| [Ctrl] [4] |  | [Ctrl] [F7] | Open |
| [Alt] | Alt | [Ctrl] [F8] | Paste |
| [Print Screen] | F13 | [Ctrl] [F9] | Find |
| [Scroll Lock] | F14 | [Ctrl] [F10] | Cut |
|  | = | [Ctrl] [1] |   |
| [Enter] | Return | [Ctrl] [2] |  -  |
| [Backspace] | Delete | [Ctrl] [3] |  +  |
| [Insert] | Help | [Ctrl] [4] |  |
| [Ctrl]  | F15 | [Ctrl] [H] | Help |
| | |  | Compose |
| | |  |  |

Note: When using key combinations, press and release the first key (Ctrl), then press and release the activation key.

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Chapter 5

The Firmware Upgrade Utility

Introduction

The purpose of the Windows-based Firmware Upgrade Utility is to provide an automated process for upgrading all CS261 switches in an installation. The program comes as part of a Firmware Upgrade Package that is specific for each device.

As new firmware versions become available, new firmware upgrade packages are posted on our website. Check the website regularly to find the latest information and packages.

Downloading the Firmware Upgrade Package

To download the firmware upgrade package:

1. that is not part of your KVM installation, go to our website (www.aten.com) and choose the model name of your device. A list of available firmware upgrade packages will appear.
2. Choose the firmware upgrade package that you wish to install (usually the most recent) and download it to your computer.

Preparation

To prepare for the firmware upgrade, do the following:

1. Use the *KVM Cable Set* provided with this unit to connect a USB port on your computer to the *PC Port* section of your switch.
2. Shut down all the computers on the KVM installation.
3. The CS261 now enters Firmware Upgrade Mode. The two Ports LEDs flash together to indicate that the unit is in Firmware Upgrade Mode.

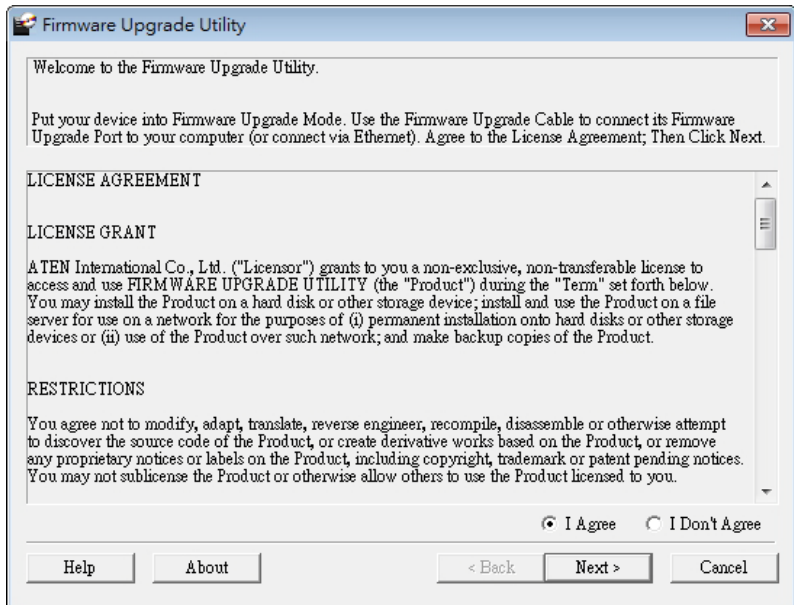
Note: While the CS261 is in Firmware Upgrade Mode, normal keyboard and mouse functions are suspended. You must complete the firmware upgrade or exit Firmware Upgrade Mode to regain normal control of the console.

Starting the Upgrade

To upgrade the firmware:

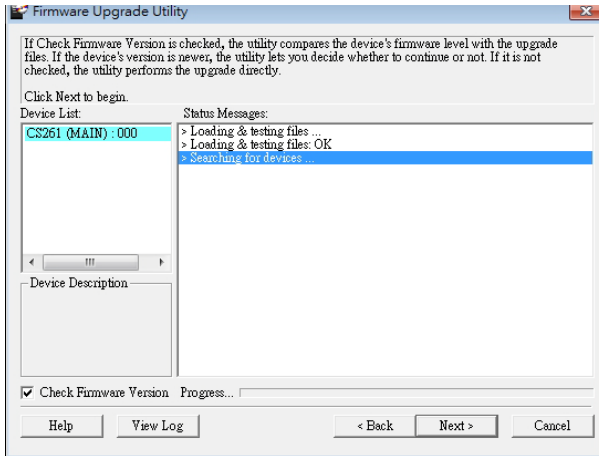
1. Run the downloaded firmware upgrade package file by double-clicking the file icon.

The *Firmware Upgrade Utility* welcome screen appears:



Note: The screens shown in this section are for reference only. The wording and layout of the actual screens put up by the *Firmware Upgrade Utility* may vary slightly from these examples.

2. Read and *Agree* to the License Agreement (enable the I Agree radio button).
3. Click **Next** to continue. The *Firmware Upgrade Utility* main screen appears. The devices capable of being upgraded are listed in the *Device List* panel:

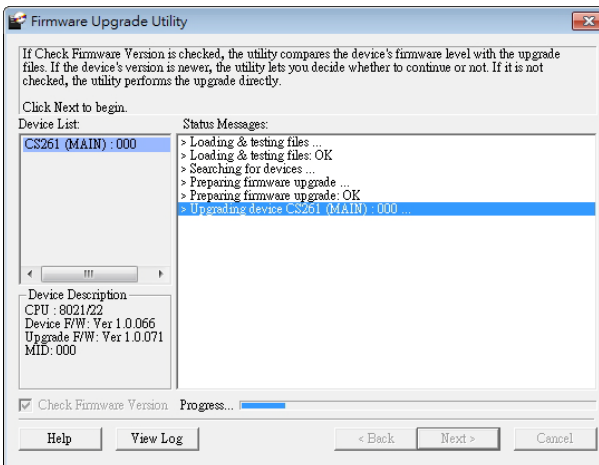


4. Select your device. Its description appears in the Device Description panel. Click Next to perform the upgrade.

If you enabled Check Firmware Version, the Utility compares the device's firmware with that of the upgrade file's. If it finds that the device's firmware is newer than the upgrade or equal to it, it brings up the dialog box informing you of this and gives you the option to Continue or Cancel.

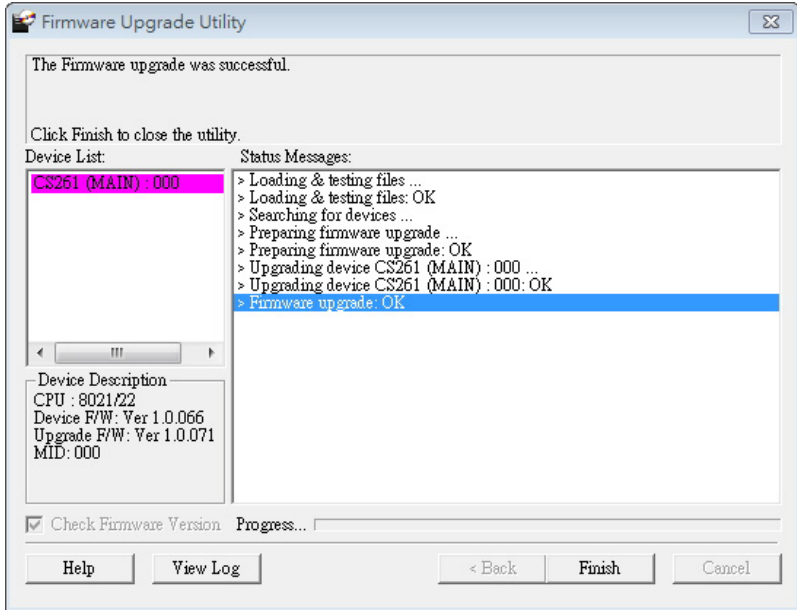
If you did not enable Check Firmware Version, the Utility installs the upgrade files without checking whether or not they are newer.

As the upgrade proceeds, status messages appear in the *Status Messages* panel, and the progress toward completion is shown on the *Progress* bar.



Upgrade Succeeded

After the upgrade has completed, a screen appears to inform you that the procedure was successful.



Click **Finish** to close the *Firmware Upgrade Utility*.

Set up your KVM installation again. See *Installation Diagram*, page 8.

Upgrade Failed

If the *Upgrade Succeeded* screen doesn't appear, it means that the upgrade failed to complete successfully. See the next section, *Firmware Upgrade Recovery*, for how to proceed.

Firmware Upgrade Recovery

There are three conditions that call for firmware upgrade recovery:

- ◆ When a firmware upgrade is manually aborted.
- ◆ When the mainboard firmware upgrade fails.
- ◆ When the I/O firmware upgrade fails.

To perform a firmware upgrade recovery, do the following:

1. Disconnect the USB connectors on the KVM cables from the computer.
2. Power on the CS261. It will now work with the original firmware.

Safety Instructions

General

- ◆ Read all of these instructions. Save them for future reference.
- ◆ Follow all warnings and instructions marked on the device.
- ◆ Do not place the device on any unstable surface (cart, stand, etc.). If the device falls, serious damage will result.
- ◆ Do not use the device near water.
- ◆ Do not place the device near, or over, radiators or heat registers.
- ◆ The device cabinet is provided with slots and openings to allow for adequate ventilation. To ensure reliable operation, and to protect against overheating, these openings must never be blocked or covered.
- ◆ The device should never be placed on a soft surface (bed, sofa, rug, etc.) as this will block its ventilation openings. Likewise, the device should not be placed in a built in enclosure unless adequate ventilation has been provided.
- ◆ Never spill liquid of any kind on the device.
- ◆ Unplug the device from the wall outlet before cleaning. Do not use liquid or aerosol cleaners. Use a damp cloth for cleaning.
- ◆ The device should be operated from the type of power source indicated on the marking label. If you are not sure of the type of power available, consult your dealer or local power company.
- ◆ The device is equipped with a 3-wire grounding type plug. This is a safety feature. If you are unable to insert the plug into the outlet, contact your electrician to replace your obsolete outlet. Do not attempt to defeat the purpose of the grounding-type plug. Always follow your local/national wiring codes.
- ◆ Do not allow anything to rest on the power cord or cables. Route the power cord and cables so that they cannot be stepped on or tripped over.
- ◆ If an extension cord is used with this device make sure that the total of the ampere ratings of all products used on this cord does not exceed the extension cord ampere rating. Make sure that the total of all products plugged into the wall outlet does not exceed 15 amperes.

- ◆ To help protect your system from sudden, transient increases and decreases in electrical power, use a surge suppressor, line conditioner, or un-interruptible power supply (UPS).
- ◆ Position system cables and power cables carefully; Be sure that nothing rests on any cables.
- ◆ When connecting or disconnecting power to hot-pluggable power supplies, observe the following guidelines:
 - ◆ Install the power supply before connecting the power cable to the power supply.
 - ◆ Unplug the power cable before removing the power supply.
 - ◆ If the system has multiple sources of power, disconnect power from the system by unplugging all power cables from the power supplies.
- ◆ Never push objects of any kind into or through cabinet slots. They may touch dangerous voltage points or short out parts resulting in a risk of fire or electrical shock.
- ◆ Do not attempt to service the device yourself. Refer all servicing to qualified service personnel.
- ◆ If the following conditions occur, unplug the device from the wall outlet and bring it to qualified service personnel for repair.
 - ◆ The power cord or plug has become damaged or frayed.
 - ◆ Liquid has been spilled into the device.
 - ◆ The device has been exposed to rain or water.
 - ◆ The device has been dropped, or the cabinet has been damaged.
 - ◆ The device exhibits a distinct change in performance, indicating a need for service.
 - ◆ The device does not operate normally when the operating instructions are followed.
- ◆ Only adjust those controls that are covered in the operating instructions. Improper adjustment of other controls may result in damage that will require extensive work by a qualified technician to repair.

Technical Support

International

| | |
|---|--|
| Email Support | Email your questions and concerns to: support@aten.com |
| Online Support ♦ Technical Support ♦ Troubleshooting ♦ Documentation ♦ Software Updates | 1. Online technical support is available to Altusen customers through our e-Support Center: http://support.aten.com 2. Online troubleshooting that describes the most commonly encountered problems and offers possible solutions to them; online documentation (including electronically available manuals); and the latest drivers and firmware for your product are available at our website: http://www.aten.com |
| Telephone Support | 886-2-8692-6959 |

North America

| | |
|---|--|
| Email Support | Email your questions and concerns to: support@aten-usa.com |
| Online Support ♦ Technical Support ♦ Troubleshooting ♦ Documentation ♦ Software Updates | 1. Online technical support is available to Altusen customers through our e-Support Center: http://www.aten-usa.com/support 2. Online troubleshooting that describes the most commonly encountered problems and offers possible solutions to them; online documentation (including electronically available manuals); and the latest drivers and firmware for your product are available at our website: http://www.aten-usa.com |
| Telephone Support | 1-888-999-ATEN |

When you contact us, please have the following information ready beforehand:

- ♦ Product model number, serial number, and date of purchase.
- ♦ Your computer configuration, including operating system, revision level, expansion cards, and software.
- ♦ Any error messages displayed at the time the error occurred.
- ♦ The sequence of operations that led up to the error.
- ♦ Any other information you feel may be of help.

Specifications

| Function | | CS261 | |
|------------------------|------------------------|--------------------|---|
| Computer Connections | | 1 | |
| Console Mode Selection | | Pushbutton | |
| Connectors | Console Ports | Keyboard | 2 x USB Type A Female |
| | | Mouse | 2 x USB Type A Female |
| | | Video | 2 x DVI-D Female (White) |
| | | Audio | 2 x Mini Stereo Jack Female (Green - Speaker) 2 x Mini Stereo Jack Female (Pink - Mic) |
| | PC Port | Keyboard/ Mouse | 1 x USB Type B Female |
| | | Video | 1 x DVI-D Female (White) |
| | | Audio | 1 x Mini Stereo Jack Female (Green - Speaker) 1 x Mini Stereo Jack Female (Pink - Mic) |
| | RS-232 | | 1 x RJ-11 Female |
| | Power | | 1 x DC Jack (Black) |
| Switches | Mode Selection | | 1 x Pushbutton |
| | Reset | | 1 x Semi-recessed Pushbutton |
| | DIP | | 1 x 4 Pin |
| LEDs | Selected | | 2 (Green) |
| | Manual | | 1 (Orange) |
| Video | | 3840 x 2160 @ 30Hz | |
| Power Consumption | | DC 5V, 4.7W | |
| Environment | Operating Temperature | | 0–50°C |
| | Storage Temperature | | -20–60°C |
| | Humidity | | 0–80% RH, Non-condensing |
| Physical Properties | Housing | | Metal |
| | Weight | | 0.72kg |
| | Dimensions (L x W x H) | | 21.00 x 8.80 x 5.55 cm |

CS261 Factory Default Settings

| Setting | Default |
|-----------------------------|-------------------------------|
| Mode Selection | Auto Mode |
| Mode Switching | [Scroll Lock] , [Scroll Lock] |
| Invoking HSM | [Num Lock] + [-] |
| Timeout | 5 Seconds |
| Screen Saver | 1 minute |
| EDID Mode | Remix Mode |
| Keyboard Operating Platform | PC Compatible |
| Keyboard Language Layout | English |
| Buzzer | Enabled |
| Firmware Upgrade Mode | Disabled |

Operation Modes

The below table describes the CS261's two operation modes and their setting options. Each setting's active and inactive users' statuses, as well as details on switching users, are also included.

| Operation Mode | Setting | Active User | Inactive User | Switching |
|----------------|---------------------|---|--|---|
| Auto Mode | Default | First come, first served | Using the keyboard or mouse triggers a message indicating the system is in use by the privileged user. | Wait for privileged user inactivity (default timeout: 5s). |
| | Private Mode | First come, first served unless preset console* activated** | Computer cannot be viewed and heard. | Preset console can gain exclusive control by pressing the Shift key six times within two seconds. Doing so again returns the installation to Default Auto Mode. |
| Manual Mode | C1 (Console 1) Mode | Console 1 has exclusive access to the computer*** | Using Console 2's keyboard or mouse triggers a message indicating the system is in use by Console 1. | Press Scroll Lock twice to switch to C2 Mode. |
| | C2 (Console 2) Mode | Console 2 has exclusive access to the computer*** | Using Console 1's keyboard or mouse triggers a message indicating the system is in use by Console 2. | Press Scroll Lock twice to switch to C1 Mode. |

Note: 1. For more information on selecting a preset console, see *DIP Switch Settings Table*, page 13.

2. The preset console can be activated and gain exclusive control by pressing the Shift key six times within two seconds.

3. The user with control of the computer can disable display and sound to the other user by using the following hotkey combination: [Num Lock]+[-],[D]
-

Troubleshooting

| Symptom | Possible Cause | Action |
|--|--|--|
| Monitor does not display after the KVM cable set is hot-plugged. | DVI graphics card is not compatible with cable set hot-plugging. | Power off all devices on the installation; power off the CS261; confirm all KVM cables are properly connected; power on the CS261; power on the computers. |
| | Graphics card driver is not up-to-date. | Upgrade to the latest graphics card driver. |
| Mouse and/or keyboard is not responding. | Switch needs to be reset. | Power off all devices on the installation; power off the CS261; wait five seconds; power on the CS261 again. |
| Cannot switch ports by pressing [Scroll Lock] twice. | Keyboard is incompatible with [Scroll Lock] invocation. | Switch to the alternate HSM invocation keys. See <i>Hotkey Settings Mode Summary Table</i> , page 17, for details. |

Limited Warranty

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